

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number  
**WO 2005/012753 A1**

(51) International Patent Classification<sup>7</sup>: **F16D 65/097**

(21) International Application Number:

PCT/IT2003/000484

(22) International Filing Date: 31 July 2003 (31.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **FRENI BREMBO S.p.A. [IT/IT]**; Via Brembo, 25, I-24035 Curno (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CORTINOVIS, Giampaolo [IT/IT]**; Via Divisione Julia, 20, I-24044 Dalmine (IT). **MASCHERETTI, Maurizio [IT/IT]**; Via Baschenis, 13, I-24040 Lallio (IT). **WOŁOSZYN, Tomasz [PL/IT]**; Via Todeschini, 74, I-24030 Mozzo (IT).

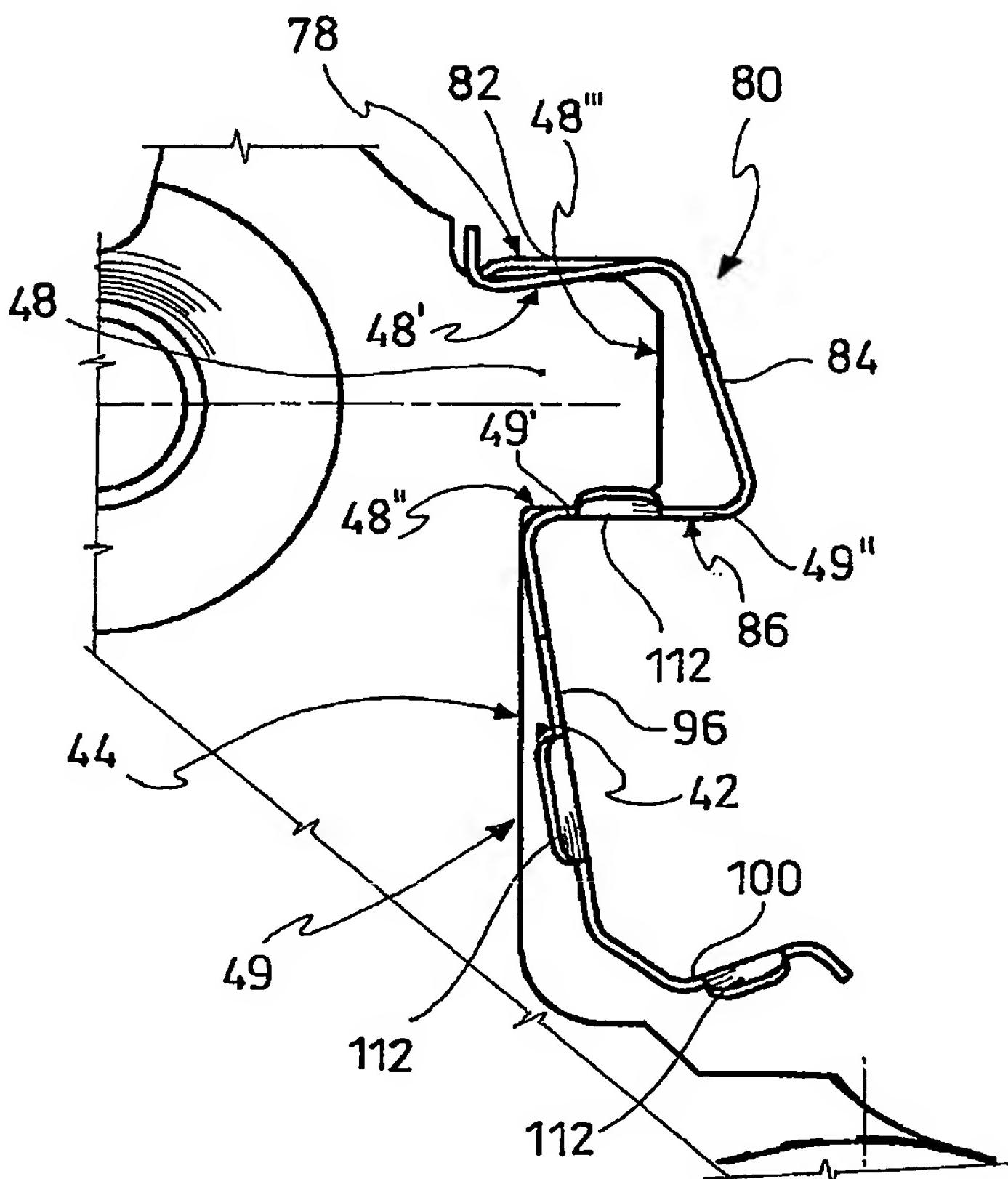
(74) Agents: **VITTORANGELI, Lucia et al.; Jacobacci & Partners S.p.A.**, Via Senato, 8, I-20121 Milano (IT).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

[Continued on next page]

(54) Title: SPRING MEMBER FOR DISC-BRAKE CALIPERS AND DISC-BRAKE CALIPER



(57) Abstract: A spring member (70) for disc-brake calipers is interposed between a lateral edge (64) of at least one pad (16) and reaction surfaces (42) of the caliper so as to act resiliently on the pad (16). The spring member (70) comprises a 'U'-shaped portion (80) suitable for forming a connection with a protuberance (48) of the reaction surfaces (42), a first resilient portion (96) suitable for acting on the pad (16) in a tangential direction (Y), and a second resilient portion (100) suitable for acting on the pad (16) in a radial direction (Z). The first and second resilient portions (96, 100) constitute a single body projecting from a first connection end (97) of the first resilient portion (96) that is connected to the 'U'-shaped portion (80), so that, when the at least one pad (16) is in a mounted configuration, it is acted on resiliently by the spring member (70) both in a radial direction (Z) and in a tangential direction (Y).

WO 2005/012753 A1



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*